

## **REMARKS**

Claims 1-15 are pending. By this Amendment, claims 1-10 are amended, and claims 11-15 are added. No new matter has been added. Reconsideration in view of the above amendments and following remarks is respectfully requested. Applicant submits that all pending claims are in condition for allowance.

### **I. EXAMINER'S JANUARY 29, 2003 FORM PTO-892**

The Office Action rejects claims 1, 3-8 and 10 under 35 U.S.C. §103(a) over U.S. Patent 6,064,362 to Brownlow et al. in view of U.S. Patent 5,335,102 to Kanemori et al. However, neither of these references is cited in the Examiner's Form PTO-892. Applicant respectfully requests that the Examiner prepare a supplemental Form PTO-892 including these two references which were cited by the Patent Office.

### **II. THE DRAWINGS SATISFY ALL FORMAL REQUIREMENTS**

The Office action objects to Fig. 3 and states that it does not include " $V_{DD}$ ". Applicant respectfully disagrees with this objection.  $V_{DD}$  is not intended to be shown in Fig. 3. The final line of paragraph four describes how the circuit provides a self-adjusted load or voltage source ( $V_{DD}$ ); i.e. a self-adjusting form of the voltage source shown in Fig. 2, namely  $V_{DD}$ . Thus, lines 5 to 6 of page 5, referred to by the Examiner, are intended to indicate that the sample and hold circuit is used to provide a variable voltage source, i.e., a variable  $V_{DD}$ .  $V_{DD}$  has been revised to read as "voltage source."

Thus, withdrawal of this objection is specifically requested.

### **III. OBJECTIONS TO THE CLAIMS**

The Office Action objects to claims 4 and 9. Claims 4 and 9 have been amended to correct the minor informalities. Withdrawal of this objection is specifically requested.

### **IV. CLAIMS 1 AND 9 SATISFY THE REQUIREMENTS OF 35 U.S.C. §112, FIRST PARAGRAPH**

The Office Action rejects claims 1 and 9 under 35 U.S.C. §112, first paragraph.

Claims 1 and 9 have been amended in conformity with §112, first paragraph. Thus, withdrawal of this rejection is specifically requested.

**V. THE CLAIMS DEFINE PATENTABLE SUBJECT MATTER**

A. The Office Action rejects claims 1-3 and 9-10 under 35 U.S.C. §102(e) over U.S. Patent 6,501,449 to Huang. This rejection is respectfully traversed.

Huang fails to teach or suggest all the features recited in independent claim 1.

Instead, Huang discloses an OLED driver circuit in which the integrated circuits (ICs) of the driver circuit are cascaded. Each IC comprises an operational amplifier connected as a unity gain buffer and also includes a current mirror circuit which provides the input current to the next IC in the cascade. However, Huang is absolutely silent about the use of a programming stage and a reproduction stage. Furthermore, Huang does not disclose a circuit which stores the voltage at the source or the drain of a driving transistor during the programming stage, and the reproduction of this voltage during the reproduction stage.

For at least the reasons discussed above, Applicant respectfully submits that Huang fails to anticipate the subject matter of independent claim 1. Accordingly, Huang also fails to anticipate the subject matter of claims 2-3 and 10, which depend from independent claims 1 and 9, respectively. Withdrawal of the rejection under 35 U.S.C. §102(e) is therefore respectfully solicited.

B. The Office Action rejects claims 1, 3-8 and 10 under 35 U.S.C. §103(a) over U.S. Patent 6,064,362 to Brownlow et al. in view of U.S. Patent 5,335,102 to Kanemori et al. This rejection is respectfully traversed.

Neither Brownlow nor Kanemori, alone or in combination, teach or suggest all the features recited in independent claim 1.

Instead, Brownlow discloses an active matrix scheme for a liquid crystal display. The scheme includes a pair of series connected transistors and a unity gain buffer arranged between a holding capacitor and the liquid crystal display element, with the output of the buffer being connected to a node between the transistors of the active matrix drive circuits. The output of the unity gain buffer is used to set the voltage across the second of the series connected transistors to be substantially zero volts after the holding capacitor has been charged from a data line. In this manner, the leakage current through this transistor is substantially zero, which prevents the voltage stored on the holding capacitor from leaking away through this transistor. However, there is no disclosure or suggestion whatsoever in Brownlow of using a programming stage and a reproduction stage. Furthermore, there is no disclosure or suggestion in Brownlow of the unity gain buffer reproducing during a reproduction stage, a voltage stored at the source or drain of a driving transistor during the programming stage.

Kanemori fails to cure the deficiencies of Brownlow discussed above with respect to claim 1. In particular, Kanemori discloses an active matrix driving scheme for a liquid crystal display device or an EL display device. Kanemori is concerned with correcting defective pixels by arranging the spacing between the matrix switching TFT and the scanning line to enable scanning branch lines formed on each end portion of the scanning line, to be cut off by irradiating with light energy.

In common with Brownlow, there is no disclosure or suggestion in Kanemori of using a programming stage and a reproduction stage. Accordingly, it is submitted that it would not have been obvious to one of ordinary skill in the art to combine the pixel driver circuit including a unity gain buffer (as disclosed by Brownlow) with an EL display device (as disclosed by Kanemori) to produce a pixel driver circuit as now defined in the amended claims.

Therefore, the Office Action has not established a prima facie case of obviousness, as the applied references fail to teach or suggest all of the subject matter of independent claim 1. Accordingly, the applied references also fail to render obvious the subject matter of claims 3-8 and 10, which depend from claim 1. Withdrawal of the rejection under 35 U.S.C. §103(a) is therefore respectfully solicited.

**VI. NEW CLAIMS**

Claims 11-15 have been added and also are patentable. For example, none of the applied references disclose or suggest the unity gain buffer as recited in claims 11-15.

**VII. CONCLUSION**

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



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Attachments:

Petition for Extension of Time  
Amendment Transmittal  
Copy of Examiner's January 29, 2003 Form PTO-892

Date: May 29, 2003

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